C.D. Howe Institute
Commentary

ISSN 0824-8001

The Currency Crisis in Russia in a Wider Context

Vladimir Popov

In this issue...

A look at the currency crisis that Russia has undergone in its transition from a centrally planned to a market economy, and a suggested explanation: straightforward macroeconomic management leading to unsustainably high exchange rates.

The Study in Brief...

Were the recent currency crises that have plagued many countries in transition from a centrally planned to a market economy the result of "financial contagion" spreading in the global economy? Or were they caused by domestic policy mistakes similar to those that prompted currency crises in southeast Asia? This paper offers a third explanation — that they resulted from policy mistakes, but of a different kind from those made in southeast Asia. The major cause of these crises was straightforward macroeconomic mismanagement leading to unsustainably high exchange rates.

The collapse of the currencies in post-communist countries is best explained by "first-generation" currency crisis models, which involve overly expansionary policies that undermine a fixed exchange rate. The Russian crisis was aggravated by the government's decision to default on its short-term and, later, long-term debt, which was by no means necessary — in other words, the debt crisis was artificially manufactured by the government. Southeast Asian currencies, by contrast, were not overvalued, and macroeconomic policy in the region was prudent. The collapse of these currencies resulted from over-extension of credit by banks and corporations, which led to unsustainable levels of foreign borrowing.

The debt explanation for the Russian currency crisis is not persuasive, since the debt levels of the Russian government and Russian companies were very modest by international standards. The "crony capitalism" explanation does not help either, since it implies that there was an excessive accumulation of debt due to the misappropriation of borrowed funds. Even if the borrowed funds had been embezzled, this could not have led to the debt and currency crises, since the critical point of really excessive indebtedness had yet to be reached. Besides, there had been no major change (except, perhaps, for some stabilization) in the levels of "cronyism," corruption, or institutional weakness in the years just before the crisis, so references to the criminal nature of Russian capitalism cannot explain much.

The currency crisis in Russia would, therefore, have occurred anyway due to the overvaluation of the ruble, even if budget deficits and indebtedness, both domestic and external, short- and long-term, had been low.

The policy lessons for transition economies are twofold. First, they need to avoid the appreciation of real exchange rates that caused the recent currency crises. Second, they need to draw conclusions from the more sophisticated government debt crises (such as occurred in Latin American countries in the early 1980s) and private sector debt crises (such as occurred in southeast Asia in 1997–98). Excess government and private debt may also lead to the collapse of national currencies. As debt levels, both government and private, in these economies continue to grow, measures should be taken to ensure that stability of the domestic financial system is not overrun by the openness of the capital accounts.

The Author of This Issue

Vladimir Popov is sector head at the Academy of the National Economy in Moscow and a visiting professor at Carleton University in Ottawa.

C.D. Howe Institute Commentary© is a periodic analysis of, and commentary on, current public policy issues. The text was copy edited by Elizabeth d'Anjou and prepared for publication by Barry A. Norris and Wendy Longsworth. As with all Institute publications, the views expressed here are those of the author, and do not necessarily reflect the opinions of the Institute's members or Board of Directors.

To order this publication, please contact: Renouf Publishing Co. Ltd., 5369 Canotek Rd., Unit 1, Ottawa K1J 9J3 (tel.: 613-745-2665; fax: 613-745-7660), Renouf's stores at 71½ Sparks St., Ottawa (tel.: 613-238-8985) and 12 Adelaide St. W., Toronto (tel.: 416-363-3171), or the C.D. Howe Institute, 125 Adelaide St. E., Toronto M5C 1L7 (tel.: 416-865-1904; fax: 416-865-1866; e-mail: cdhowe@cdhowe.org).

$10.00; ISBN 0-88806-465-9

In recent years, currency crises have affected several southeast Asian countries as well as transition economies — those making the move from centrally planned to market systems. The Russian crisis of August 1998 was perhaps the most spectacular example, but it was preceded by currency crises in Bulgaria and Romania in 1996 and in Ukraine and Belarus in 1997–98, then followed by those in Kyrgyzstan and Georgia in late 1998 and Kazakhstan in early 1999.

Were these crises the result of "financial contagion" spreading throughout the global economy? Or were they caused by domestic policy mistakes, similar to those made in southeast Asia? In this *Commentary*, I argue that, in fact, neither explanation is true. Instead, I propose a third explanation: that the currency crises in these transition economies resulted mostly from domestic policy mistakes, but of a different nature than those made in southeast Asia.

Currency crises in post-communist countries are best explained by "first-generation" currency crisis models — that is, by simple macroeconomic mismanagement manifested in overvalued exchange rates. The Russian currency collapse was a straightforward balance of payments crisis caused by an unsustainably high ruble exchange rate. It was complicated, but not generated, by budget deficits and mounting government debt. It would have occurred without Asian viruses, Russian fiscal imbalances, or the prodigality of the Russian oligarchs. The root of the crisis was the overappreciation of the exchange rate: from early 1992 to late 1995, the real exchange rate of the ruble rose more than 600 percent — more than in other transition economies. This rise was more than enough to both kill off export growth and cause an unaffordable rise in imports, undermining Russia's trade and current account surplus and depleting its foreign exchange reserves.

To make matters worse, the Russian crisis was aggravated by the government's unnecessary decision to default on its short-term and (later) long-term debt. In southeast Asia, on the contrary, currencies were not overvalued and the macroeconomic fundamentals were sound.[1] In those countries, currency collapses were a side effect of bank credit overextension and excessive corporate debt issued in foreign currencies.

The currency crises in transition economies were, in a sense, therefore, less sophisticated than those in southeast Asian countries. The countries in transition repeated the most obvious of macroeconomic mistakes, telling a story that is only too familiar: the real exchange rate appreciates as a result of the combination of a nominal exchange rate peg and continuing inflation; the current account deteriorates; capital flows out of the country in anticipation of a devaluation; foreign exchange reserves are depleted; and the currency collapses. The situation in Asia was more complex: the real exchange rate did not appreciate; government macroeconomic policies were generally prudent, with no budget deficits and no significant government debt; and the currency crisis evolved from a private sector debt crisis.

This paper draws heavily on the book *The Asian Crisis Turns Global* (Montes and Popov 1999) and on my articles and papers listed in the references. The updated Russian edition of the book was published in September 1999 under the title *Asian Virus or Dutch Disease: Theory and Evidence of Currency Crises in Russia and Elsewhere* (Delo Publishers).

1 Although, to be sure, microeconomic and regulatory policies in southeast Asia — such as those influencing corporate governance, explicit and implicit government guarantees, and the commitment of international financial institutions to bail out creditors in case of crisis — were not sound.

The most important lesson to be drawn is that the exchange rate is too important to use only to fight inflation.

Currency crises in the transition economies can, therefore, offer lessons in the internal importance of consistency in macroeconomic policy goals and in the efficiency of different macroeconomic stabilization programs. Perhaps the most important lesson to be drawn is that the exchange rate — often called the single most important price in an open-market economy — is too important to use only to fight inflation, at least when it is pegged and lacks appropriate macroeconomic policy support.

The crises in the Asian countries, on the other hand, demonstrated the need for government regulations that set not only the rules of the game but also strongly encourage prudent behavior, particularly in the challenging environment of liberalizing capital accounts and domestic financial systems undergoing deregulation. The transition economies still have those challenges ahead of them; their first task is to overcome the mistakes that led to their "first-generation" crises.

Defining Currency Crises

It is useful to distinguish between currency (foreign exchange) crises *per se* and more complicated cases of government debt (financial) and private debt (banking) crises — both of which may, even in mature market economies with strong currencies, lead to currency crises as well.

Foreign Exchange (Currency) Crises

An abrupt fall in the exchange rate can occur even without the interference of capital flows, creditors, lenders, or banks. The only necessary precondition for a currency collapse is for a central bank to "peg" its exchange rate or attempt to maintain a "dirty" (partly flexible) float at an unsustainable level. If a country's monetary policy differs too much from that of its neighbors, the demand for and supply of foreign exchange moves out of equilibrium, leading to downward (or upward) pressure on the currency and thus to its devaluation (or revaluation).

In the case of downward pressure on the currency, the ability of a central bank to defend a given rate is limited by its stock of foreign exchange reserves, which typically suffice to finance imports for a few months at most or capital outflows for a few days. In the case of upward pressure, the central bank's ability to defend the currency by building up foreign exchange reserves is constrained by the inevitable inflationary consequences of a growing money supply.[2]

Once a brisk devaluation or revaluation of a currency occurs, it causes shifts in relative prices and in the terms of trade, which may provoke a supply-side recession. Changes in the relative prices of assets denominated in foreign and domestic currencies may also disrupt the repayment of credit, which can provoke a financial or banking crisis.

This type of currency crisis was described initially by Krugman (1979) as a "balance of payments crisis." He later called it a "canonical currency crisis model," in which the crisis results from "a fundamental inconsistency between domestic policies — typically the persistence of money-financed budget deficits — and the attempt to maintain a fixed exchange rate" (Krugman 1997).

---

2 A central bank can try to "sterilize" the inflows of cash by selling securities, but this is only a stopgap measure, since the resulting higher interest rates generally induce larger capital inflows in the long run.

Exactly this type of crisis occurred in Russia in August 1998: a straightforward, "plain vanilla" currency crisis caused by the persistent overvaluation of the ruble following the introduction of a narrow exchange rate corridor in mid-1995. Because the currency was overvalued, export growth slowed down and finally stopped completely. Meanwhile, imports continued to rise, so that the current account shrank until, in the first half of 1998, it became negative. The capital outflow accelerated as investors began to see that devaluation was likely. This led to the depletion of foreign exchange reserves, which, at US$15 billion at the beginning of 1998, had not been large to start with. Emergency credits from the International Monetary Fund (IMF) — the first installment of US$4 billion was handed out in July 1998 — were used up in about four weeks, and devaluation followed on August 17.

The consequences of the currency crisis in Russia were aggravated by the clumsy actions of the government.

The consequences of the currency crisis in Russia were aggravated, however, by the clumsy actions of the government, which overreacted by defaulting on its own short-term domestic debt and imposing a 90-day moratorium on external debt service by private banks and companies. These measures were unnecessary because the crisis was — or should have been — related purely to currency. There was no true debt or banking crisis in the making. But by defaulting on its debt obligations, the Russian government actually provoked both debt and banking crises.

Government Debt Crises

A second type of currency crisis is caused by a government's inability to honor its fiscal obligations. If a country's debts are denominated in foreign currency, as were Mexico's *tesobonos* (treasury banks) in 1994, the connection is obvious: capital flows out in the expectation of default or devaluation, leading to reserve depletion, which then triggers actual devaluation. If the obligations are denominated in domestic currency, investors who fear monetization of these debts by the central bank (leading to inflation and devaluation) switch to foreign currency assets. In 1994, the Mexican peso was undermined by this mechanism; similarly, in the early 1980s, a large outflow of capital caused by doubt about their governments' ability to service their debt brought down several Latin American currencies, even though they were not initially overvalued.

Krugman (1997) calls currency crises caused by mounting debt "second-generation" crises: if investors think the government sees benefits from depreciating domestic currency debt that outweigh the costs of devaluation, they attack the currency, and a crisis erupts.

Private Sector Debt Crises

A third, rarer, type of currency crisis arises from an overaccumulation of debt by private organizations (both banks and nonfinancial firms) rather than by governments. In the words of Krugman, the southeast Asian currency crises of 1997–98

> were only part of a broader financial crisis, which had very little to do with currencies or even monetary issues per se. Nor did the crisis have much to do with the traditional fiscal issues, [but rather was related to issues] normally neglected in currency crisis analysis: the role of financial intermediaries (and the moral hazard

> associated with such intermediaries when they are poorly regulated), and the prices of real assets such as capital and land. (1998, 1–2.)

The Asian story is neither a first-generation crisis brought about by fiscal deficits nor a second-generation one brought on by macroeconomic temptation. It is really the story of a bubble in asset prices and its subsequent collapse; in this case, the currency crises were more a symptom than a cause of the malady.

A theory called the Lawson doctrine, named after a former UK chancellor of the exchequer, states that, if a government takes care of its own indebtedness, current account deficits and debts resulting from the activities of the private sector will be taken care of by market mechanisms (Montes 1998). In southeast Asia in 1997–98, however, the assumptions underpinning the Lawson doctrine turned out to be wrong. Nongovernment debt crises, which ultimately led to currency crises, broke out in several Asian countries despite the fact that they had strong macroeconomic fundamentals: high savings rates, strong growth, undervalued rather than overvalued currencies, low inflation, government budget surpluses, and low government debt. Excessive borrowing abroad by the private sector (banks in Thailand, industrial companies in Indonesia, *chaebols*[3] in South Korea) unnerved investors and resulted in outflows of capital, which, in turn, provoked currency crises.

Currency Crises in the Real World

The classification of currency crises I have just outlined is, of course, rough: every currency crisis is caused by a unique combination of factors. A crisis may combine features of all three types. Sachs, Tornell, and Velasco (1996) examine three indicators as predictors of currency crisis:

- real currency appreciation (which leads to overvaluation of the exchange rate);
- the ratio of M2 (cash as well as bank demand and term deposits) to foreign exchange reserves (the indebtedness of the public and private sectors); and
- the strength of recent lending booms (the indebtedness of the private sector).

They find that, of 20 countries with emerging market economies, each one that was particularly hard hit by the 1994–95 crisis (such as Mexico, Argentina, and Brazil) had displayed in the preceding period not only a rather low reserve ratio, but also a strong real appreciation of currency and a lending boom. Similarly, the rapid growth in the ratio of bank credit to gross domestic product (GDP) preceded earlier financial troubles in Argentina (1981), Chile (1981–82), Colombia (1982–83), Uruguay (1982), Norway (1987), Finland (1991–92), Japan (1992–93), and Sweden (1991).

The recent Asian currency crises were unique in that they were preceded by virtually no disequilibrium in the government sector.

Nevertheless, the recent Asian currency crises were unique in that they were preceded by virtually no disequilibrium in the government sector. The macroeconomic strategy of each of the governments in question — that is, its fiscal and monetary policy, exchange rate, and debt management — was prudent and gave no indication of coming trouble.

---

3 *Chaebols* are large financial-industrial groups, similar to Japan's *zaibatsu* and *keiretsu*.

Real Exchange Rate Appreciation: Theory and Evidence

Most analysts agree that mature market economies cannot sustain prolonged appreciation of their real exchange rates. Yet many hold the view that developing countries and transition economies may, in fact, experience long-term real appreciation of their currencies.

Exchange Rates in Transition and Developing Economies

One theoretical explanation for this possibility, called the Balassa-Samuelson effect, states that, if productivity grows faster in sectors producing tradable output (mainly goods) than in sectors producing nontradable output (mainly services) and if wage rates are equalized across sectors — with the result that economy-wide real wage increases lag behind productivity growth — then the real exchange rate can appreciate without undermining business profits. This explanation is hardly feasible for a transition economy, however, since the services sector in such a economy is generally underdeveloped before transition and tends to show *stronger* productivity gains than the traded goods sector.

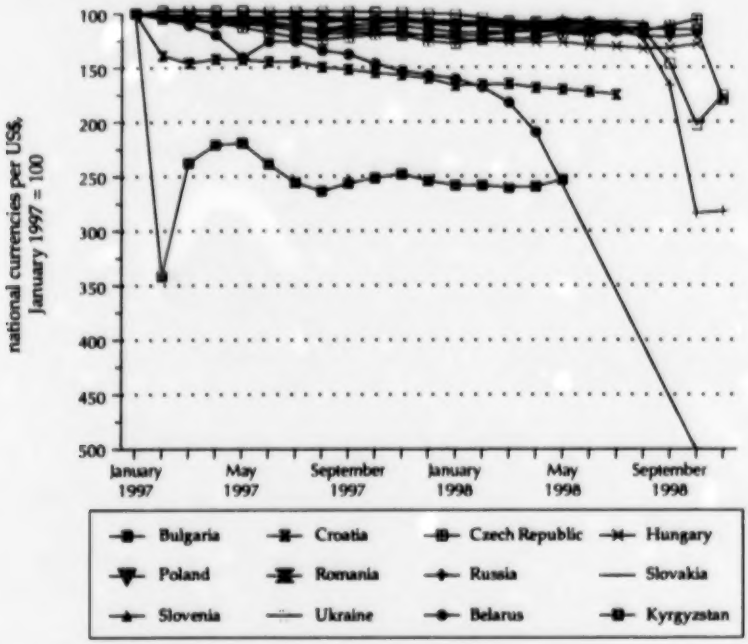
Grafe and Wyplosz (1997) offer an alternative explanation for transition economies. They argue that, even if the appreciation of the exchange rate undermines business profits (in the export sector and in industries that compete with imports), this should not necessarily lead to a deterioration of the current account, since the need for capital accumulation in transition economies declines — that is, they can operate with lower savings ratios than they could before the transition. Indeed, the evidence shows that the ratio of investment to GDP was abnormally high in most centrally planned economies because of the need to compensate for low capital productivity (Shmelev and Popov 1989) and that, in virtually all cases, when these economies move into the transition phase, investment ratios initially fall. Even after a country's recovery, its investment ratio usually does not return to the levels that existed prior to the reforms (Popov 1998a). Even though the decline in investment-to-GDP ratios has now ended in most transition economies, Halpern and Wyplosz (1997) argue that real appreciation in transition economies will continue until the transition is over, which may be "decades away."

Room for the appreciation of real exchange rates in transition economies is limited; if real appreciation continues beyond reasonable limits, it leads eventually to a currency crisis.

The evidence suggests, however, that room for the appreciation of real exchange rates in transition economies is limited; if real appreciation continues beyond reasonable limits, it leads eventually to a currency crisis. Real exchange rates in virtually all transition economies appreciated strongly after prices were deregulated and the currency became convertible.[4] By the mid-1990s, however, real appreciation had slowed down or stopped in many countries. Then, between 1996 and 1998, eight post-communist countries with real exchange rates that had previously been rapidly appreciating saw their currencies collapse (in chronological order, they were Bulgaria, Romania, Belarus, Ukraine, Russia, Kyrgyzstan, Georgia, and Kazakhstan). Figure 1 illustrates this pattern of stagnation followed by a precipitous decline in the exchange rate. But in all eight of these countries, the devaluation was no less significant than in most of Asia in 1997–98 or in Mexico in 1994–95. The currencies of Bulgaria and Russia depreciated by nearly two-thirds — a more significant amount than in any Asian

4 Among major eastern European and former Soviet Union economies, only Slovenia did not experience a more or less prolonged period of real appreciation of its national currency.

Figure 1: ***Exchange Rates in Selected Transition Economies, 1997–98***



Note: The rate for Belarus is the Central Bank of Russia and street market rate.

Sources: IMF 1996; Central Bank of Russia.

country except Indonesia, where the rupiah at one point lost 80 percent of its value. In Belarus, the decline was even more significant than in Indonesia.

Equilibrium Exchange Rates in Transition and Development Economies

The post-communist countries discussed above differed from Latin American countries in that their governments were not considerably indebted, and from the southeast Asian countries mentioned in that the companies and banks in the former centrally planned economies did not accumulate sizable debt. Most communist governments were, in fact, quite prudent in accumulating external debt, and much of it was written off on the eve of transition — for example, since Russia assumed all foreign debt of the former Soviet Union, the other former Soviet republics started their independent existence with no indebtedness at all. On the other hand, private companies and banks in these transition economies do not have much of a credit history (under central planning they were not allowed to borrow abroad) and are just starting to accumulate foreign debt.

A survey of the ratios of foreign debt to GDP in transition economies (see Table 1) turns up only four cases where the ratio exceeded 60 percent: Bulgaria, Hungary, Mongolia, and Vietnam. Because of debt restructuring, however, debt-service payments even in these economies were kept quite low — Bulgaria's was the highest at 20.5 percent of export revenues in 1996. By way of comparison, debt-service payments amounted to 30 to 40 percent of export revenues for major Latin American countries and to 20 to 30 percent in the largest Asian developing economies. Moreover, short-term debt in

Table 1: ***External Indebtedness and Reserves, Selected Countries, 1996***

	Ratio of Debt to GDP	Ratio of Debt-Service Payments to Goods and Services Exports	Ratio of Short-Term Debt to Total Debt	Ratio of Reserves to GDP	Ratio of Reserves to Short-Term Debt
			(percent)		
Transition economies					
Albania	32.0	3.5	7.0	12.5	536
Armenia	27.0	10.7	0.3	11.6	14,265
Azerbaijan	10.0	1.3	3.6	5.8	1,606
Belarus	21.0	2.0	9.5	2.4	122
Bosnia and Herzegovina	53.0	—	—	—	—
Bulgaria	89.0	20.5	9.2	9.0	111
China	17.0	8.7	19.7	13.7	409
Croatia	24.0	5.5	10.0	12.8	533
Czech Republic	42.0	8.3	29.6	23.8	192
Estonia	9.0	1.3	26.4	14.7	619
Georgia	26.0	—	4.7	—	—
Hungary	62.0	41.0	12.5	21.9	283
Kazakhstan	14.0	9.9	7.6	9.4	888
Kyrgyzstan	37.0	9.2	1.1	298.1	73,248
Latvia	9.0	2.3	9.4	14.8	1,755
Lithuania	16.0	2.9	12.2	10.8	554
Moldova	39.0	6.2	3.2	17.4	1,394
Mongolia	65.0	9.7	1.3	16.6	1,960
Poland	31.0	6.4	0.2	13.4	21,612
Romania	23.0	12.6	9.8	8.9	393
Russia	25.0	9.6	9.5	3.7	155
Slovakia	41.0	11.9	38.3	20.5	131
Slovenia	21.0	8.7	1.4	12.4	4,210
Tajikistan	24.0	0.1	1.9	—	—
Turkmenistan	18.0	10.6	34.8	—	—
Ukraine	18.0	6.1	4.8	4.5	519
Uzbekistan	9.0	8.1	3.9	—	—
Vietnam	123.0	3.5	14.5	5.7	32
Latin America					
Argentina	31.0	44.2	13.0	6.7	166
Brazil	26.0	41.1	19.8	8.0	155
Chile	48.0	32.3	25.5	20.9	171
Mexico	44.0	35.4	19.1	5.8	69
Peru	43.0	35.4	22.1	18.0	190
Venezuela	51.0	16.8	8.2	23.8	569
Asia					
India	22.0	24.1	7.5	7.0	424
Indonesia	64.0	36.8	25.0	8.6	54
Malaysia	52.0	8.2	27.8	28.1	194
Pakistan	39.0	27.4	9.4	2.0	55
Philippines	51.0	13.7	19.3	14.0	142
Thailand	56.0	11.5	41.4	20.9	90

Source: World Bank 1998.

transition states was relatively low compared with total foreign debt, and in most countries foreign exchange reserves substantially exceeded outstanding short-term indebtedness.

Of the eight post-communist countries that experienced currency crises, five — Romania, Ukraine, Kyrgyzstan, Georgia, and Kazakhstan — could boast that all debt indicators were good, which suggests that their crises were, by and large, exchange rate crises. In Belarus, Bulgaria, and especially Russia, the exchange rate overvaluation was still the major reason for crisis, but a shortage in reserves (which were barely enough to cover short-term debt) created the potential for an additional debt crisis.

Undervaluation of the domestic currency is a common feature of developing and transition countries, which usually need to earn a trade surplus to finance debt-service payments and capital flight.[5] The exchange rates of most countries other than the mature market economies are low relative to their purchasing power parity (PPP) value (see Table 2). Resource-rich countries, however, face the danger of catching the "Dutch disease," whereby resource exports are so profitable that they allow the country to earn a trade surplus even with an overpriced exchange rate. Thus, Middle Eastern countries (mostly oil exporters) are the only major group of states in the developing world with exchange rates close to their PPP values, as shown in Table 2.

On the other hand, many other developing countries, including those rich in resources, have pursued a conscious policy of low exchange rates as part of a general export-oriented strategy. To stimulate overall growth, they limit consumption and imports while encouraging exports and investment. This was the strategy adopted by Japan, South Korea, Taiwan, and Singapore when they were poor, and it continues to be pursued by many emerging market economies. China, for example, continues to keep its exchange rate low — one-fifth of the PPP rate — by speedily accumulating foreign exchange reserves. It is no accident that fast-growing economies are also known for their large and rapidly growing international reserves: China (including Hong Kong), Taiwan, Singapore, Malaysia, and Thailand together account for 20 percent of total world reserves. The reserve-to-GDP ratio in these countries is typically above 20 percent, compared with a world average of 8 percent (World Bank 1997a).

In other words, there are two general reasons for relatively low exchange rates:

- a generally low level of development, which imposes a burden on the balance of payments through capital flight and debt-service requirements; and
- a conscious policy to underprice the exchange rate in order to use it as an instrument for export-oriented growth.

The evidence does not support the view that the transition economies were the innocent victims of movements of capital in the global economy.

If these factors applied equally to both development and transition economies, their equilibrium exchange rates would remain substantially below their PPP rates. The continuous appreciation of the real exchange rate is thus an invitation for trouble that, sooner or later, can be expected to result in a currency crisis.

Overall, the evidence does not support the view that the transition economies were the innocent victims of movements of capital in the global economy or that Asian contagion was the root of their crises. First, Bulgaria and Romania experienced their crises in 1996, before the first wave of the Asian crises broke in July 1997 with the

5 Hölscher (1997) makes a similar argument with respect to eastern European countries, drawing on the West German experience with an undervalued mark in the 1950s.

Table 2: ***Ratio of the Actual to the PPP Exchange Rate of National Currencies, Selected Countries, 1993 and 1996***

Countries/Regions	Actual Exchange Rate as a Percentage of the PPP Rate		Countries/Regions	Actual Exchange Rate as a Percentage of the PPP Rate	
	1993	1996		1993	1996
	(percent)			*(percent)*	
OECD countries*	116		*Transition economies**	81	
Germany	126	133	Central Europe*	54	
Japan	165	158	Bulgaria	30	25
United States	100	100	Croatia	65	94
Portugal	73	77	Czech Republic	36	48
*Developing countries**	44		Hungary	62	63
Asia*	36		Poland	48	59
India	24	23	Romania	31	34
Indonesia	30	33	Slovakia	37	47
Malaysia		44	Slovenia	69	78
Philippines	35	34	USSR*	91	
South Korea	72	81	Armenia		20
Thailand	43	45	Azerbaijan		32
Turkey	54	48	Belarus	8	30
*Latin America**	46		Estonia	29	64
Argentina		90	Georgia		29**
Brazil		70	Kazakhstan		39
Chile		43	Kyrgyzstan		19
Mexico	58	45	Latvia	27	50
Peru		56	Lithuania	19	47
Venezuela		36	Moldova	14	28
Middle East*	83		Russia	26	70
Kuwait		67	Tajikistan		3
Saudi Arabia		68	Turkmenistan		45
United Arab Emirates		100	Ukraine	19	39
Africa*	37		Uzbekistan		22
Ethiopia		20	China	22	20
Mozambique	17		Mongolia		21
Nigeria	36	90	Vietnam		20

* 1990.

** 1995.

Sources: *Russian Statistical Yearbook* 1997, 698; *Finansiviye Izvestiya*, Nov. 10, 1995; World Bank 1998; EBRD 1997.

devaluation of the Thai baht. Second, as we shall see in examining the Russian case, there is only limited room for real appreciation of the national currency in a transition economy. The crises were, therefore, probably inevitable given the pursuit of exchange-rate-based stabilization programs for several years.

Exchange Rate Management in Transition Economies

All policymakers in post-communist countries face the challenge of macroeconomic stabilization after price deregulation. Economists and policymakers tend to disagree, however, on how best to accomplish this stabilization. What kind of exchange rate policy is best for a transition economy? Some analysts stress the importance of fixing

the nominal exchange rate as an anchor for monetary policy; this strategy is known as exchange-rate-based stabilization. Others claim that real exchange rates ought to be kept stable (implying constant devaluation, if inflation is higher than elsewhere) to stimulate exports and growth (Bofinger, Flassbeck, and Hoffmann 1997).

Each approach has its advantages. The first allows a government to fight high inflation quickly, at the initial stages of macroeconomic stabilization. But the second may be better suited for overcoming a transformational recession and promoting economic recovery by facilitating the transfer of resources from domestic demand to exports — a pressing need in all transition economies.

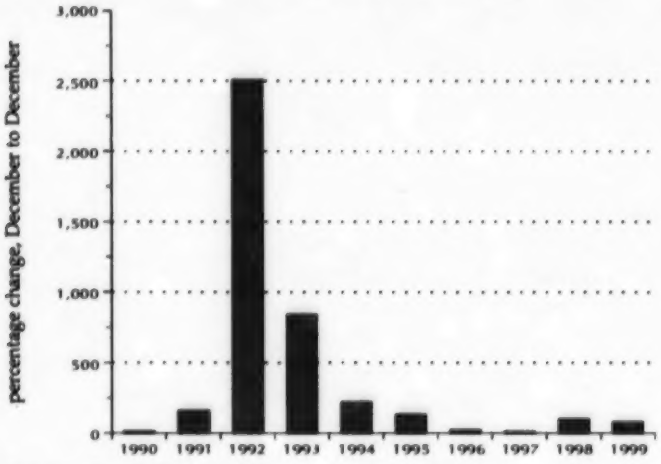
The conventional "shock therapy" approach to macroeconomic stabilization recommends the use of a pegged exchange rate as a nominal anchor while pursuing anti-inflationary policy (Sachs 1994; 1995; Åslund 1994). Some countries in the region (Estonia, Lithuania, Bulgaria, and Bosnia and Herzegovina) have introduced currency boards, which have been successful in fighting inflation. Other post-communist states (the Czech Republic, Hungary, Poland, and Slovakia) have introduced fixed exchange rate regimes and have also enjoyed a fair degree of success. Nonetheless, virtually all transition economies have experienced real exchange rate appreciation, which has undermined their competitiveness in export markets, worsened their current account balances, and forced their central banks to adopt high interest rates in order to retain and attract domestic and foreign saving when the local economy actually needed exactly the opposite. Overall, since the mid-1990s, the major problem in the region seems to be not the lack of stable exchange rates, but the overvaluation of national currencies, which hinders growth and creates the threat of currency crises. As a weapon to fight inflation, exchange rate management can play only a limited role, and at the end of the day inflation has to be dealt with at its source — that is, high budget deficits, unregulated banking systems, and fragile revenue collection (Desai 1998).

Virtually all transition economies have experienced real exchange rate appreciation.

The policy of keeping the *real* exchange rate stable instead of pegging the *nominal* rate now seems more appealing to policymakers, not least because countries pursuing such policies are doing reasonably well. Zettermeyer and Citrin (1995) find that money-based stabilization was successful in, for example, Albania, Slovenia, Croatia, and Macedonia and that there is no evidence that it is an inferior strategy to the pursuit of exchange-rate-based stabilization.

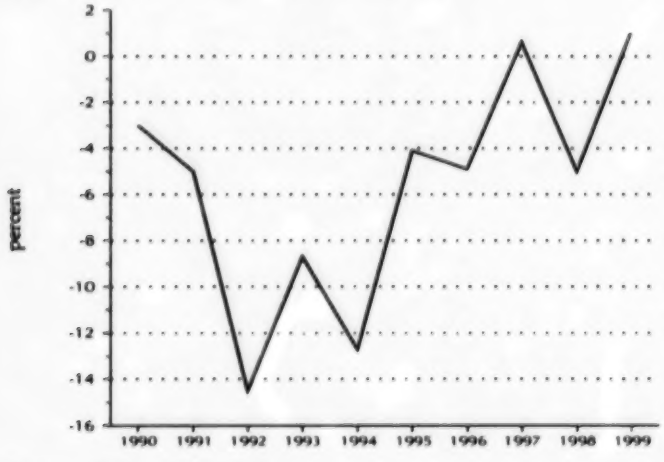
I do not discuss the technicalities of managing a lower exchange rate in this *Commentary*. It may, however, be appropriate to mention the important practical advantages of such a policy. The approach is easier to implement than other measures to promote growth, since it favors the interests of all powerful industrial groups. For example, it stimulates the export sector and provides protection from import competition in industries primarily dependent on the domestic market, and it imposes costs on less organized and less politically influential consumers. In addition, a low exchange rate policy is better than trade protectionism because it does not encourage corruption; it provides benefits to all exporters without leaving room for bureaucratic discretion in selecting industries or enterprises for favors. As they say in Russia, devaluation cannot be stolen.

Figure 2: ***Annual Inflation Rate, Russia, 1990–99***



Source: Russia, Goskomstat.

Figure 3: ***GDP Growth Rate, Russia, 1990–99***



Source: Russia, Goskomstat.

Russia's 1998 Financial Collapse

Perhaps the most striking of all currency crises in transition economies was the one that broke out in Russia in August 1998. An exchange rate that had remained stable for three years lost more than 60 percent of its value in days (Figure 1). Where inflation had been less than 1 percent per month before the crisis (Figure 2), afterwards prices increased by 50 percent in two months. Real output, which, before the crisis, registered a small increase (0.6 percent) in 1997, fell by about 5 percent in 1998 (Figure 3).

Macroeconomic Stabilization, 1995–98

Perhaps the worst consequence of the financial collapse in Russia was that it marked the failure of a government program of macroeconomic stabilization that had been pursued with some success for more than three years. After experiencing yearly inflation of several hundred or more percent immediately following price deregulation on January 2, 1992, Russia opted for exchange-rate-based stabilization. In mid-1995, the Central Bank of Russia (CBR), after accumulating foreign exchange reserves and managing to stabilize the ruble exchange rate for the first half of the year, introduced a "crawling peg" — a sliding exchange rate corridor with initially narrow boundaries (Figure 4). The program was backed by the determination of both the government and the CBR to bring down the money supply growth rate and thus curb inflation. Its key was containing the government budget deficit within reasonable limits and finding noninflationary ways to finance it.

The Russian government maintained this program for three years. It refrained from increasing the budget deficit even though this required drastic expenditure cuts, since revenues, despite efforts to improve tax collection, continued to fall (Figure 5). Furthermore, Russia was able to avoid monetization, financing its deficit mostly through financial market borrowing of two kinds:

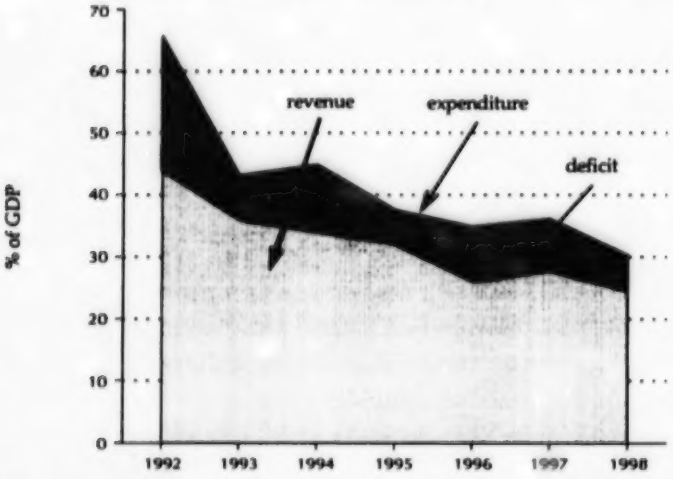
- short-term, ruble-denominated treasury bills (which were also purchased by foreign investors); and
- foreign currency borrowing from international financial institutions, Western governments, banks, and the Eurobond market.

The program reduced the growth of the money supply and brought inflation down.

Figure 4: ***Ruble-US Dollar Exchange Rate and the Ratio of Russian to US Consumer Prices, 1994–2000***

Sources: Russia, Goskomstat and the Central Bank of Russia.

Figure 5: ***Consolidated Government Revenues and Expenditures, Russia, 1992–98***



Sources: EBRD, various issues.

Weak Foundations of the Macrostabilization

This initially successful stabilization was, however, based on weak foundations: an overvalued ruble exchange rate and a CBR policy of keeping the real exchange rate intact — that is, devaluing the nominal rate in line with inflation.

As a result, the real exchange rate of the ruble approached 70 percent of the PPP value in late 1995 and stayed at that level until the crisis struck (see the ratio of Russian to US prices in Figure 4). Export growth rates first slowed — from 20 percent annual growth in 1995 to 8 percent in 1996 for total exports, and from 25 percent growth to 9 percent for exports to nonmembers of the Commonwealth of Independent States (CIS) — then plummeted in 1997–98. By 1996 Russia (and Slovenia, with by far the richest transition economy), having sustained solid growth from 1993 on, had the smallest gap between domestic and international prices (Table 3) among transition economies (see Popov 1996a; 1996b; 1998b).

The decrease in oil prices on the world market in 1997–98 added insult to injury: the fall in exports accelerated in the first half of 1998, which, together with still-rising imports, virtually wiped out the trade surplus (Figure 6). The current account turned negative in the first half of 1998. Since the debt needed to be serviced and investors continued to move capital out of the country — a trend that began in the early 1990s (Smorodinskaya 1998)[6] — the negative current account was a signal of approaching crisis.

The exchange rate became barely sustainable in 1998 under a new vulnerability developed with respect to short-term capital flows. Foreign investment in ruble-denominated government treasury bills, first allowed by the authorities in 1995, had already increased to nearly one-third of the US$50 billion market for government treasury bills in 1997.[7] By February 1998, the total value of treasury bills held by nonresidents exceeded Russia's official foreign exchange reserves (*The Economist*, May 23, 1998).

---

6 Capital flight from Mexico, South Korea, and China was estimated to be 0–3 percent a year during the 1990s, whereas in Russia the comparable figure was 2–10 percent a year (Yang and Chen 2000).

7 This figure includes investment in ruble-denominated treasury bills through "gray schemes" — that is, through resident intermediaries.

Table 3: ***Ratio of the Actual Exchange Rate to the PPP Rate of the US Dollar, Selected Transition Economies, 1990–99***

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
					(range of monthly averages)					
Slovenia	0.9–1.4	1.0–1.7	1.4–1.6	1.4–1.6	1.3–1.6	1.1–1.3	1.3–1.3	1.4–1.5	1.3–1.5	1.3–1.5
Hungary	1.9–2.4	1.9–2.0	1.7–1.8	1.6–1.8	1.5–1.8	1.5–1.6	1.7–1.8	1.6–1.8	1.7–1.8	1.7–1.8
Poland	2.1–3.9	1.6–1.9	1.8–2.0	1.8–2.0	2.1–2.3	1.8–2.0	1.8–1.8	1.8–2.1	1.8–2.0	1.9–2.1
Czech Republic	2.5–3.8	3.5–3.1	2.7–3.1	2.5–2.6	2.2–2.5	2.0–2.2	1.9–2.0	2.0–2.3	2.0–2.3	1.9–2.3
Slovakia	2.9–3.9	3.0–3.6	2.9–3.0	2.6–2.8	2.4–2.7	2.1–2.3	2.1–2.2	2.3–2.4	2.2–2.4	2.3–2.7
Croatia	—	—	—	—	—	—	—	1.7–1.9	1.7–1.9	1.8–2.0
Lithuania	—	—	—	—	2.4–3.2	1.8–2.3	1.7–1.8	1.5–1.6	—	—
Romania	1.8–2.6	1.6–5.0	2.8–4.2	2.2–3.1	2.1–2.6	2.1–2.5	2.4–2.6	2.0–3.3	1.7–2.0	2.0–2.3
Bulgaria	3.3–5.1	2.9–10.9	3.0–4.7	2.3–2.8	2.3–3.1	1.8–2.2	1.9–2.8	1.7–3.2	1.6–1.8	1.6–1.9
Ukraine	—	—	—	—	—	1.8–2.5	1.3–1.7	1.3–1.4	1.3–2.1	2.0–2.7
Russia	—	33.0–131.0	10.2–45.7	2.5–8.0	2.4–2.8	1.4–2.4	1.4–1.5	1.4–1.5	1.5–2.8	2.7–2.9

Source: *PlanEcon*, various issues.

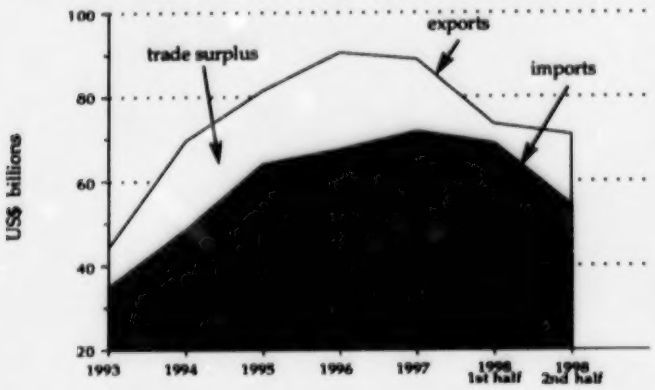
Foreign investors also started to withdraw from the Russian stock market. By fall 1997 they were estimated to control no less than 10 percent of the shares in the booming Russian stock market, its capitalization having surpassed US$100 billion at the time. Over the first half of 1998, Russian stock prices fell by nearly 90 percent in US dollar terms to their lowest levels since 1994 (Figure 8). The CBR decided to expand slightly the width of the exchange rate band from the beginning of 1998 (see Figure 4), but this small move added little room to maneuver. The CBR increased the refinancing rate to 150 percent in May 1998 to discourage capital flight, which was running at about US$0.5 billion a week at a time when foreign exchange reserves amounted to only US$15 billion. Later, the refinancing rate was lowered, but yields on government securities remained at nearly 50 percent in real terms and again rose above 100 percent in August.

As is typical in such cases, the central bank and the government stuck to their strong currency policy to the very last moment, maintaining interest rates too high for an economic recovery while negotiating a standby package with the IMF. This policy was designed to maintain consumption and imports, avoiding export-oriented restructuring. The IMF finally provided the first US$4 billion installment of a US$20 billion package in July 1998. It went directly to the CBR to replenish the foreign exchange reserves, but even this was not enough to calm investors. Public statements by Russian officials about the stability of the ruble, including one made by President Boris Yeltsin three days before its devaluation, contributed, if at all, by discouraging investor confidence even further.

Managing the Crisis

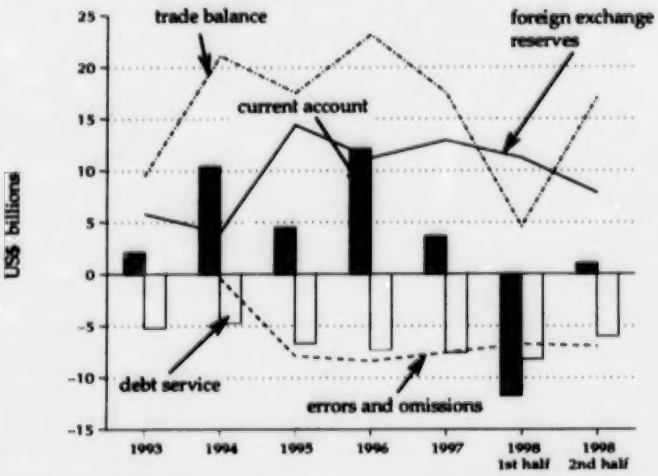
Like a number of other economists (see, especially, Illarionov 1998; Shmelev 1998), I strongly believed before the crisis broke out that the ruble was overvalued — that if it was not soon devalued "from above," it was likely to get devalued "from below" by a

Figure 6: ***Russia's Foreign Trade, 1993–98***



Source: Russia, Goskomstat.

Figure 7: ***Russia's Balance of Payments and Foreign Exchange Reserves, 1993–98***



Note: Data for reserves are for year-end, excluding gold.

Source: Russian Economic Trends.

currency crisis, with much greater costs (Popov 1996a; 1996b; 1997; 1998b; 1998e).[8] In some ways it was not difficult to predict the crisis — indeed, quite a number of scholars did so several months ahead of time. Even Jeffrey Sachs, who had earlier been a strong advocate of exchange-rate-based stabilization, spoke out publicly in June 1998 in favor of devaluing the ruble (*New York Times*, June 4, 1998).[9]

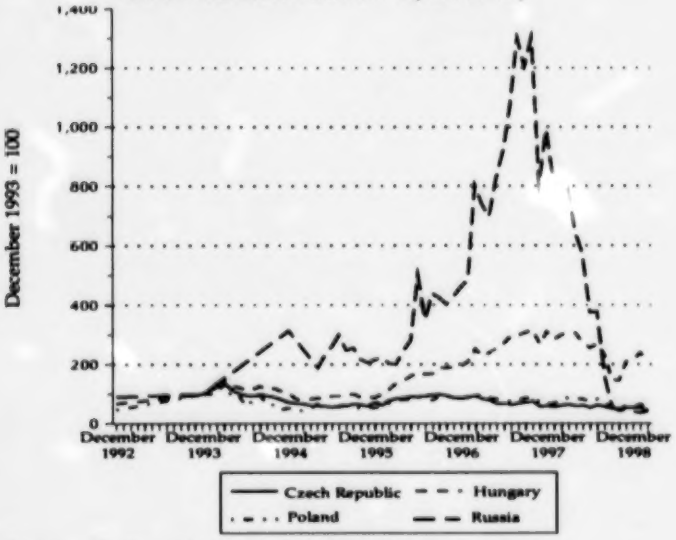
What virtually nobody predicted was the way the Russian government would handle the devaluation — by defaulting on domestic debt and on part of the international debt held by banks and other corporations. This drastic course of action was by no means necessary. As Figure 9 shows, the indebtedness of the Russian government had been growing in recent years, but not at a significant rate relative to GDP, since GDP, in US dollar terms, was growing rapidly due to the real appreciation of the ruble. In absolute terms, total government debt by mid-1998 had not even reached the threshold of 60 percent of GDP. Even when the wage and payment arrears of the Russian government were taken into account, total indebtedness did not increase much: government wage arrears before the crisis stood at 13 billion rubles, or just 0.5 percent of annual GDP, whereas total government arrears (which were several times higher than wage arrears alone) were largely offset by tax arrears owed to government.

Even though short-term obligations held by nonresidents exceeded total foreign exchange reserves after mid-1998, the absolute value of outstanding short-term debt held by foreigners was small (US$15–20 billion) and denominated in rubles. Thus, it would not have become

8 This argument was also developed in various newspaper articles. See "Growth strategy," *Segodnya*, March 14, 1996 (in Russian); "The currency crisis is possible in Russia," *Finansoviye Izvestiya*, October 30, 1997 (in Russian); "An emerging economy's unaffordable luxury," *Financial Times*, December 11, 1997; "What exchange rate of the ruble is needed for Russia?" *Nezavisimaya Gazeta*, May 21, 1998 (in Russian); "Arithmetic of devaluation: why do we need a rate of 12 rubles per dollar?" *Nezavisimaya Gazeta*, June 1998, supplement (in Russian).

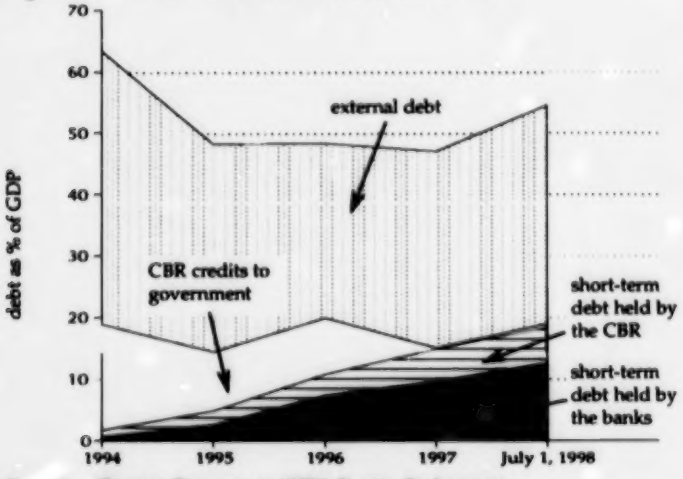
9 The other major proponent of exchange-rate-based stabilization, Anders Åslund, a former advisor to the Russian government, continued (much like the IMF) to deny the need to devalue even in July (see Åslund 1998).

Figure 8: ***Stock Price Indexes in US Dollars, Various Transition Economies, 1992–99,***



Sources: *The Economist*; for Russia in 1992–93, author's estimates.

Figure 9: ***Russian Government Debt, 1994–98***



Sources: "Russian Economy in 1998"; Russia, Goskomstat.

more burdensome to service as a result of devaluation alone.[10]

Investor uncertainty in Russia in the first half of 1998 was associated first and foremost with the low credibility of the government's commitment to defend the ruble. The ability of the government to service its debt was not much doubted, however. The difference between the rates at which the Russian government borrowed abroad in hard currency (returns on Eurobonds were around 15 percent) and the rates offered to prime borrowers (7 percent) was much lower than the gap between returns on ruble-denominated bonds (about 100 percent in real terms) and Eurobonds (15 percent). The former gap is an indicator of the country risk (the risk associated with default by government), whereas the second reflects the currency risk (the risk that the currency will depreciate); clearly, the market at the time was anticipating devaluation, not default.

Unfortunately, defaulting on its obligations was not the only way in which the Russian authorities mismanaged the currency crisis. Shortly after the default, the CBR's clumsy actions provoked a run on the banks and a banking crisis. And banks, already and inevitably hurt by the devaluation, were also further damaged by the default.

The problem was that Russian banks held a considerable portion of their assets in short-term government securities. They also lost the opportunity to seek external financing when the government imposed a 90-day moratorium on servicing their external debt. To make matters worse, the CBR in early September introduced a scheme to partially guarantee personal deposits in private banks, an action that implied losses for the depositors, especially for holders of dollar accounts at private banks.[11] The run on the banks that

10 This was in sharp contrast to the Mexican situation in the second half of 1994. As in Russia, the value of outstanding short-term government debt in Mexico exceeded the amount of foreign exchange reserves. But Mexican *tesobonos* were denominated in US dollars, so devaluation of the peso could not and did not decrease the dollar value of the debt.

11 In the state-owned Sberbank (Savings Bank), which accounted for 75 percent of all household deposits, savings were guaranteed by the state. The CBR, while extending its guarantees to deposits at commercial banks, asked the depositors to move them to Sberbank, promising to pay them back — two months later, and then only in part. US dollar deposits, for instance, were to be converted into rubles at a September 1 rate of 9.33 rubles per dollar, when the market rate of the dollar was about twice that.

followed this announcement naturally contributed to the developing paralysis of the Russian banking system. In September 1998, the banks processed few payments, and businesses started to carry out their transactions in cash, barter, and cash substitutes.

After the Crisis

One possible response to the crisis, which was discussed in September 1998 (after Viktor Chernomyrdin succeeded Sergei Kiriyenko as acting prime minister but before Yevgeny Primakov took charge), was a currency board. But this idea has many shortcomings.

A currency board requires full (or nearly full) backing of the money supply by foreign exchange reserves. Under such conditions, an outflow of capital inevitably reduces the money supply, leading to deflation and, usually, a reduction of output. A currency board will only work in a country where there is enough price flexibility to ensure that the deflationary shocks will not intolerably affect output. For small, open economies (such as Hong Kong, Estonia, Lithuania, Bulgaria, or Bosnia and Herzegovina), where domestic prices already depend heavily on world market prices, this flexibility seems to exist. For medium-sized countries (such as Argentina), there is still not enough evidence to tell. Larger countries, such as Russia, probably do not have the necessary price flexibility. Further, a country's ability to provide lender-of-last-resort support is weakened considerably with the introduction of a currency board, making it a risky path for countries with vulnerable banking systems (Santiprabhob 1997).

There is another, even more persuasive practical objection to a currency board for Russia. It is generally recognized (see, for example, Hanke, Jonung, and Schuler 1993) that the preconditions for a successful currency board include a credible government that is able to eliminate budget deficits. It is also generally accepted that the current Russian government in this respect is among the least credible in the world. In any event, the Primakov government, which took office in September 1998, ruled out the currency board option. The CBR continued to maintain a floating exchange rate, which was stabilized at around 25 rubles per US dollar in the year following the crisis.

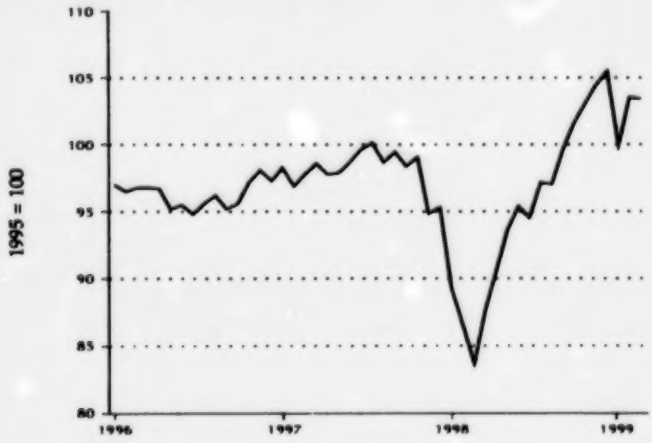
The response of the real (nonfinancial) sector to the new exchange rate surprised many observers. Russian industry, ailing after the August 1998 financial crash, has since fall 1998 begun to register growth rates higher than had been seen for more than half a century — about 2 percent a month, or more than 25 percent a year (Figure 10). Industrial output was 16 percent higher in August 1999 than in August 1998. Whereas before the crisis the overvalued ruble was undermining the competitiveness of domestically produced goods, after devaluation domestic producers were able to take advantage of new export opportunities and a shift in demand from foreign- to Russian-made goods.

The industry boom and other events since summer 1998 make it clear that the policy of keeping the exchange rate at an unreasonably high and unsustainable level was in error.

This industry boom and other events since summer 1998 make it clear that the policy of keeping the exchange rate at an unreasonably high and unsustainable level was in error. By pegging the ruble at a lower rate and continuing to build up foreign exchange reserves, the CBR could have stimulated exports, allowed lower domestic interest rates, and "de-dollarized" the Russian economy. A weaker ruble could have allowed higher saving rates without high interest rates, creating additional stimulus for production, investment, and exports, while limiting consumption and imports.

Basically, the August 1998 currency crisis was the market correcting the mistaken attempt to defend an unsustainable peg. The different patterns of decline in output in

Figure 10: ***Index of Industrial Output, Russia, 1996–99***



Note: Data are seasonally adjusted.

Source: Russian Economic Trends.

Russia (before the currency crisis) and in southeast Asia (after the crisis) point to the different nature of those currency crashes. In Asia, where exchange rates were not overvalued, the devaluation led to an adverse supply shock that, with the depressing effects of the credit collapse, lowered output. In Russia, devaluation of the previously overvalued currency restored previously lost competitiveness and led to a boom.

What Next?

Russia's longer-term prospects will depend on its ability to overcome three major constraints. First, the weakness of state institutions is still the major long-term factor responsible for the poor performance of the Russian economy compared with those of eastern European countries on the one hand and those of China and Vietnam on the other. There is no quick fix for the problem: it will adversely affect Russia's economic performance for years to come.

Second, the prospects for solid macroeconomic stabilization in Russia are not bright. Inflation, currently at about 1–2 percent a month, may easily get out of hand. In August 1999, Vladimir Putin became the country's sixth (acting) prime minister in 18 months. Since the parliamentary elections in December 1999 and in anticipation of the presidential elections in March 2000, investors have been waiting to see whether the authorities can stick to their promises to keep the ruble stable.

Third, international lending is not going to resume until the default mess is cleaned up and the external debt restructured or written off again. Foreign direct and portfolio investment could make a difference to Russian economic growth, but the prospects for capital inflows are still bleak.

All in all, growth in Russia is currently very fragile. Government revenues are growing, but in real terms they are still below the pre-crisis level. The trade balance is positive again, but only by enough to match debt-service payments and capital flight, so foreign exchange reserves are not growing. Any disturbance, political or external, could topple this shaky equilibrium. There is a chance, however, that the current government could build the foundations for more stable growth after the March 2000 presidential elections.

The best option for dealing with the continuing aftermath of the crisis would be to revoke the government's decision to default but maintain the floating ruble.

The best option for dealing with the continuing aftermath of the crisis at present would be to revoke the government's decision to default (the moratorium expired in mid-November 1998 and the banks were left to negotiate the restructuring of debts with creditors) but maintain the floating ruble. Such an approach would restore confidence among investors: Russian assets would become a bargain and capital inflows would gradually resume. Six billion dollars —the post-devaluation US dollar value of the ruble-denominated short-term debt held by nonresidents —is a small price to pay to resume international financing. The probability that this option will be

pursued, however, is close to zero, since the government reached a preliminary agreement with its creditors in November 1998 that involved repaying only 10 percent of the debt in cash and converting the rest into bonds with longer maturity. Furthermore, in August 1999 Russia received a new US$4.5 billion credit from the IMF to continue to service its debt to the Fund. It has also reached preliminary agreements with the Paris and London Clubs on debt forgiveness and restructuring.

Alternative Explanations for the Russian Crisis

There are currently two prevailing explanations for the August 1998 currency crisis in Russia, although they are not mutually exclusive. One stresses the unfortunate coincidence of several events — the Asian virus, a drop in oil prices, and political instability, among others. According to Yevgeny Yasin (1999), minister without portfolio in the former Kiriyenko government and a respected academic economist, "the crisis was not just the result of evil forces or incompetence, but was caused by the coincidence of circumstances, most of which were against us." Kiriyenko himself believes that Russia had the chance, even as late as June 1998, to avoid the crisis had the Duma only accepted the tax increases suggested by the government (*Expert*, January 18, 1999).

Another explanation (and the view taken by former high officials of the CBR) is that the crisis was caused by budget problems — specifically, persistent deficits resulting in mounting government debt, or the "GKO pyramid" (see "Russian Economy in 1998" 1999; GKOs are short-term government bonds). Sergei Alexashenko, then deputy chairman of the CBR, said "No doubt, the current financial crisis is mostly of budgetary and debt origin" (1999). Former government officials say they knew about the problem, but were not able to force the Duma to accept the necessary tough measures to improve tax collection. Hence the scapegoat is again the former parliament, which the government widely referred to as creating obstacles to the reforms.

One variation on these views is the theory that the government debt pyramid was doomed to collapse. The returns on GKOs were many times higher than those available in the real sector (Nekipelov 1998). High financial returns that are not based on the healthy foundation of the real economy cannot continue for long; it is inevitable, under this view, that they finally came to an end in the form of a crisis.

Popular Western explanations of the Russian crisis are associated one way or another with cronyism and the criminal nature of Russian capitalism.

Western explanations of the Russian crisis, at least those that appear outside the regional studies field, are generally even more straightforward. The most popular explanations are associated one way or another with cronyism and the criminal nature of Russian capitalism. The government is accused of caving in to the interests of "oligarchs" — heads of large financial-industrial groups in the Russian economy — that have effectively "privatized" the state and care only about enriching themselves in the short run (see Popov 1999 for details).

Some go even further, seeing the root of all Russia's evils in a misunderstanding of the nature of money. Proponents of this view point to the Russian "national character" as described, for instance, in Dostoyevsky's *The Gambler*, where Russians are portrayed as squanderers and as liking roulette so much because it allows one to become rich effortlessly in two hours. They mention that 70 years of Bolshevism virtually abolished money as a legal tender of predictable value, making the value of the ruble "something stranger than zero" to Russians (*The Economist*, December 19, 1998).

All such explanations, however, miss some key points. First, although the role of money and credit in the Soviet centrally planned economy was limited compared with that in a market economy, its degree of monetization (the ratio of M2 to GDP) and creditization (bank credit outstanding as a percent of GDP) in the 1980s was much higher than that in the Russian market economy of the 1990s — about 50 percent compared with less than 15 percent. In that sense, the Soviet planned economy was more monetized than the new Russian market economy.

Soviet planners, moreover, had been prudent in their macroeconomic policies for four decades. From 1947, at the time of Stalin's confiscatory monetary reform, to 1987, which marked the beginning of macroeconomic mismanagement under Mikhail Gorbachev, annual inflation rate was only 3 percent — less than it was in most other countries over that period.[12] Government budget deficits were low or nonexistent, government domestic debt was minuscule, external indebtedness was low, and debt-service payments were timely. Since neither the "demonetized Russian soul" nor the "difficult Soviet heritage" had prevented Soviet planners from achieving macro-level stability and solid monetization of the economy for more than 40 years, it makes little sense that they should suddenly do so in the 1990s.

The weakening of Russian state institutions is the main long-term factor explaining the poor performance of the Russian economy.

Second, there is no doubt that Russian state institutions have been degrading in recent years and that their weakening is the main long-term factor explaining the poor performance of the Russian economy and that of the entire CIS (Kolodko 1999). For comparison, one might look, on the one hand, to China and Vietnam, which have strong authoritarian institutions, and, on the other, to the central European countries, which have strong democratic institutions. Recent research comparing 28 transition economies suggests that it is not the speed of liberalization that determines performance in these economies, but the institutional capacity of the state — a factor overlooked by both the "shock therapist" and "gradualist" schools of thought (Popov 1998c; 1998d; 2000). An understanding — a so-called post-Washington consensus — of the role of state institutions is, however, becoming more widespread (Stiglitz 1998; 1999).

In most former Soviet and Balkan countries, the collapse of institutions is observable in a great many areas, such as:

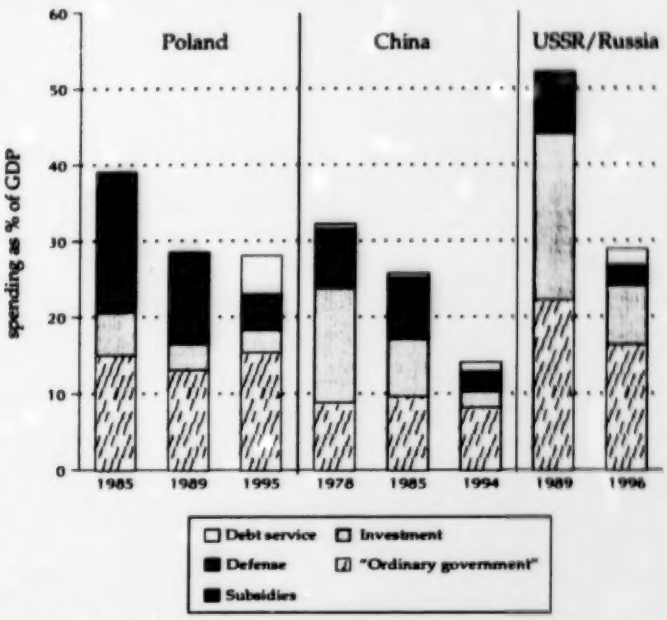
- the dramatic increase of the share of the shadow economy;
- the decline of government revenue as a proportion of GDP;
- the inability of the state to deliver basic public goods and an appropriate regulatory framework;
- the accumulation of tax, trade, wage, and bank arrears;
- the demonetization, "dollarization," and "barterization" of the economy, evident in the declining ratios of domestic currency and bank financing to GDP;
- the poor enforcement of property rights, bankruptcies, contracts, and law and order in general; and
- increased crime rates.

Most of these phenomena can be defined quantitatively; when indicators such as these are compared, China and Vietnam, remarkably, are seen to be closer in this respect to eastern European countries than to the CIS.

---

12 This figure applies to both the open and the hidden inflation rate — that is, the increase in monetary overhang, or the forced savings equal to the difference between money demand and the supply of goods at controlled prices.

Figure 11: ***Government Expenditures in Three Transition Economies***



Note: Data do not include off-budget funds, which are substantial in all three countries and are used mostly for social insurance purposes. Defense expenditure figures are from official statistics and are lower than Western estimates, which is likely to lead to overstatement of spending for investment and subsidies, at the expense of defense outlays. For the USSR/Russia, investment and subsidies are shown together.

Sources: For China, World Bank 1996b; for Russia, Goskomstat; for Poland, Rocznik Statystyczny 1990, Warszawa, and data from Institut Finansow provided by G. Kolodko.

Figure 11 shows three major patterns of change in the share of GDP represented by government expenditures, which generally coincide with the three major archetypes of institutional development and three distinct models of transition. Under strong authoritarian regimes, as in China, cuts in government expenditures occurred at the expense of defense, subsidies, and budget-financed investment, while expenditures for "ordinary government" as a percentage of GDP remained largely unchanged (Naughton 1997). Under strong democratic regimes, budgetary spending, including that used for "ordinary government," declined in the pre-transition period, as in Poland, but increased during the transition itself. Finally, under weak democratic regimes such as Russia's, the reduction in general government spending led not only to a decline in defense spending, investment, and subsidies, but to the downsizing of "ordinary government," which undermined and, in many instances, led directly to the collapse of the institutional capacities of the state.

In China, total budgetary spending and "ordinary government" expenditures were much lower than in Russia or Poland, but they were sufficient to preserve the functioning institutions, since the government's financial contribution to the social safety net had traditionally been low. Also, because China's GDP was growing, the real spending for "ordinary government" in that country in the first seven years of reform grew about twofold. In Russia, meanwhile, although expenditure for ordinary government seems to have been not much lower than in Poland, the pace of reduction during the transition exceeded the slowdown of GDP. The different GDP growth dynamics of Poland and Russia meant that, in the former, ordinary government financing grew by about one-third in real terms from 1989 to 1995/96, while in the latter, it *fell* by about two-thirds. The Russian pattern of institutional decay proved to be extremely detrimental for investment and, more important, for capital productivity and output.

In Russia, the disintegration of state institutions was striking. Although the government should be credited for cutting expenditures in line with falling revenues (recall Figure 7), the sharp reduction in the government's share of GDP obviously led to institutional degradation. Worse, the cuts proceeded chaotically, without reallocation; the government simply kept all programs half-alive, half-financed, and less-than-half working. As a result, a gap emerged between the obligations of the state and its ability to deliver what it had promised: public education, health care, infrastructure,

law-and-order institutions, and fundamental research and development all decayed. Virtually all services provided by government — from collecting customs duties to regulating street traffic — became notorious symbols of economic inefficiency. Numerous cases of government failure further undermined the credibility of the state. Government institutions that delivered public goods and social transfers were slowly dying, and were displaced in part by private and semi-private businesses.

Nevertheless, even though institutional weakness was the single most important long-term factor contributing to the magnitude of the Russian recession, it was not linked directly to the collapse of the ruble or the failure of the macroeconomic stabilization program. As I argued earlier, the debt levels of the Russian government and Russian companies were modest by international standards: even if the borrowed funds had been embezzled, this would not have led to the debt and currency crises, since the critical point of excessive indebtedness was still several years off. Nor was there a major change with respect to cronyism, corruption, or other institutional weakness in the years immediately preceding the crisis, so references to the criminal nature of Russian capitalism cannot explain much.

The floating ruble is perhaps the least politicized issue of current Russian government economic policy.

Finally, the floating ruble is perhaps the least politicized issue of current Russian government economic policy. While there are reasons to believe that macroeconomic stabilization in Russia did not materialize between 1992 and 1994 because of lack of consensus among powerful industrial lobbies on how to finance cuts in government expenditure (Popov 1996a; 1996b), there is no evidence whatsoever that a low-ruble strategy would not have been acceptable politically during the 1995–98 period.

Conclusions and Policy Implications

There are important general policy lessons to be learned from an overview of the recent financial crises affecting transition and southeast Asian economies.

Preventing Appreciation of the Real Exchange Rate

Unlike the currency crises in southeast Asia, the crises in transition economies seem to have been caused principally not by excess debt accumulation by the private sector but by appreciation of the real exchange rate, which undermined the competitiveness of exports, damaged the current account, and finally caused an outflow of capital in anticipation of a devaluation, which ultimately followed. At the end of the day, in transition economies as well as in other countries, if the real exchange rate appreciates too much, crisis results. Far more effective is a policy oriented toward a competitive real exchange rate and strong export growth.

Exchange-Rate-Based versus Money-Based Stabilization

Whereas exchange-rate-based stabilization might work to fight inflation at the initial stages of transition, there is growing evidence that, at later stages, it becomes an obstacle to economic growth and creates the potential for a currency crisis by allowing the real exchange rate to appreciate.

Bringing inflation down to single digits in transition and other emerging market economies with many market imperfections and structural rigidities is by itself a

questionable policy. True, in countries with a highly inflationary environment, chances are high that output growth will be weak, if it occurs at all. It has been shown, however, that 40 percent a year inflation is a sort of threshold: there is no evidence that inflation below 40 percent a year is ruinous for growth, while there is even some evidence that inflation below 20 percent a year may even be beneficial (see Bruno 1995; Bruno and Easterly 1995; Stiglitz 1998). It may even be argued that the threshold for transition economies is actually higher than for other emerging markets because of the former's numerous structural rigidities. In most successful reforms, inflation was by no means insignificant: it never fell below 20 percent a year in the first five years of transition in Poland and Uzbekistan, while in China, although it was low most of the time, there were outbursts of inflation in 1988–89 and again in 1993–95, when it increased to about 20 percent.

In this respect, it seems as though the Russian authorities went from one extreme (very high inflation in 1992–94) to the other, when they tried to be more Catholic than the Pope. After the exchange-rate-based stabilization program was enacted in 1995, it was pursued with greater diligence than elsewhere: just before the crisis, in July 1998, the year-to-year inflation rate was brought down to its lowest level of 6 percent — less than in most transition economies. Arguably, Russia's pre-crisis low level of inflation did impose unnecessary strains on the economy, causing the avalanche of nonpayments and leading to a reduction in output that was induced by lack of demand. In fact, after modest growth in 1997, output started to decline in the first half of 1998.

Russia's pre-crisis low level of inflation imposed unnecessary strains on the economy.

Fixed Versus Flexible Rates

Given the relatively small size of most emerging market economies, their rapid growth, and their incomplete integration in the world economy, floating exchange rates may provide more flexibility in adjusting to external shocks. Most developing and transition economies (other than the smaller ones, such as Hong Kong, Singapore, and perhaps the Baltic states) are large enough to retain some inflexibility in domestic prices *vis-à-vis* world market prices, making a flexible rate advantageous. Moreover, when major international banks, investment funds, and hedge funds operate with pools of money comparable to or even exceeding the value of the reserves held by many countries, maintaining a pegged exchange rate in the face of adverse market sentiment can be very difficult, even if the flexibility of domestic wages and prices is high.

Irrevocably fixed exchange rates or currency boards force countries to accept inflows and outflows of capital as changes in domestic money and credit, usually with impacts on real indicators. And as the recent experience of southeast Asian and transition economies shows, this kind of adjustment in the real sector can be quite costly. Under fixed exchange rates, neither changes in foreign exchange reserves nor domestic price changes may provide enough room to handle international capital flows.

Openness of Capital Accounts and the Strength of the Banking System

For transition economies in which the currency crisis was not triggered by a debt and lending boom, there is an important lesson to be derived from the southeast Asian

experience with "twin liberalizations" in the capital account and in domestic financial systems. As debt, both government and private, continues to grow in these economies, measures should be taken to ensure that the safety and reliability of banking institutions are not overrun by the openness of capital accounts. In Russia, the credit and banking crisis was unnecessary — it was a manufactured crisis caused by poor policies: the government's default on its short-term debt and the CBR's "guarantee" measures, which undermined the credibility of commercial banks. Nevertheless, wherever the blow came from, it revealed the long-known and long-discussed weakness of the domestic banking system. In a sense, the crisis of 1998 demonstrated that, when the next shock comes from international capital flows, Russian banks will not be able to withstand the blow any better, unless prudential regulations have been tightened and a viable banking sector created. Until sound financial institutions develop within a sound policy framework, the continuing policy of relatively open capital flows will remain an invitation for trouble.

References

Alexashenko, S. 1999. *The Battle for the Ruble*. Alma Mater. In Russian.

Asian Development Bank. 1997. *Asian Development Outlook 1997 and 1998*. Manila.

Åslund, A. 1994. "The Case for Radical Reform." *Journal of Democracy* 4 (October).

———. 1998. "Don't devalue the ruble." *Moscow Times*, July 7.

———. 1999a. "Why Has Russia's Economic Transformation Been So Arduous?" Address to the World Bank Annual Bank Conference on Development Economics, Washington, DC, April 28–30.

———. 1999b. "Russia's Collapse." *Foreign Affairs* 78 (September–October): 64–78.

Bofinger, P., H. Flassbeck, and L. Hoffmann. 1997. "Orthodox Money-Based Stabilization (OMBS) versus Heterodox Exchange-Rate-Based Stabilization (HERBS): The Case of Russia, Ukraine and Kazakhstan." *Economic Systems* 21 (March): 1–33.

Bruno, Michael. 1995. "Does Inflation Really Lower Growth?" *Finance and Development* 32 (September): 35–38.

———, and William Easterly. 1995. "Inflation Crisis and Long-Run Growth." Washington, DC, World Bank. Unpublished.

Desai, P. 1998. "Macroeconomic Fragility and Exchange Rate Vulnerability: A Cautionary Record of Transition Economies." *Journal of Comparative Economics* 26 (4): 621–641.

European Bank for Reconstruction and Development (EBRD). *Transition Report*. Various issues. London: EBRD.

Grafe, C., and C. Wyplosz. 1997. "The Real Exchange Rate in Transition Economies." Paper presented at the Third Dubrovnik Conference on Transition Economies, Dubrovnik, Croatia, June 25–28.

Griffith-Jones, S. 1997. "Causes and Lessons of the Mexican Peso Crisis." Working Paper 132. Helsinki: World Institute for Development Economics Research.

Halpern L., and C. Wyplosz. 1997. "Equilibrium Exchange Rates in Transition Economies." *IMF Staff Papers* 44 (December): 430–461.

Hanke, S., L. Jonung, and K. Schuler. 1993. *Russian Currency and Finance. A Currency Board Approach to Reform*. New York: Routledge.

Hölscher, J. 1997. "Economic Dynamism in Transition Economies: Lessons from Germany." *Communist Economies and Economic Transformation* 9 (2): 173–181.

Illarionov, A. 1998. "How the Russian Financial Crisis Was Organized." *Voprosy Ekonomiky* 11–12. In Russian.

International Monetary Fund (IMF). 1996. *International Financial Statistics*. Washington, DC: IMF.

Kolodko, G. 1999. "Ten Years of Postsocialist Transition: The Lessons for Policy Reforms." Working Paper 2035. Washington, DC: World Bank.

Krugman, P. 1979. "A Model of Balance of Payments Crises." *Journal of Money, Credit, and Banking* 11: 311–325.

———. 1997. "Currency Crises." Paper prepared for a National Bureau of Economic Research conference, October. Available from Internet website: http://web.mit.edu/krugman/www/crises.html.

———. 1998. "What Happened to Asia?" January. Available from Internet website: http://web.mit.edu/krugman/www/DISINTER.html.

Montes, M. 1998. *Currency Crisis in Southeast Asia*. Updated ed. Singapore: Institute of Southeast Asian Studies.

———, and V. Popov. 1999. *The Asian Crisis Turns Global*. Singapore: Institute of Southeast Asian Studies.

Naughton, B. 1997. "Economic Reform in China: Macroeconomic and Overall Performance." In D. Lee, ed., *The System Transformation of the Transition Economies: Europe, Asia and North Korea*. Seoul: Yonsei University Press.

Nekipelov, A. 1998. "The Nature of Russia's Economic Catastrophe — An Alternative Diagnosis." *Transition: The Newsletter about Reforming Economies* (World Bank), October.

PlanEcon. Washington, DC. Various issues.

Popov, V. 1996a. "Inflation during Transition: Is Russia's Case Special?" *Acta Slavica Iaponica* 14: 59–75.

———. 1996b. *A Russian Puzzle: What Makes Russian Economic Transformation a Special Case?* Helsinki: World Institute for Development Economics Research.

———. 1997. "Lessons from the Currency Crisis in Southeast Asia." *Voprosy Ekonomiky* 1. In Russian.

———. 1998a. "Investment in Transition Economies: Factors of Change and Implications for Performance." *Journal of East-West Business* 4: 1–2.

———. 1998b." Preparing the Russian Economy for the World Market Integration." In A. Fernandez Jilberto and Andre Mommen, eds., *Regionalisation and Globalisation in the Modern World Economy*. London: Routledge.

———. 1998c. "Economic Outcomes of Transformation: The Impact of Initial Conditions and Economic Policy." *Voprosy Ekonomiky* 8. In Russian.

———. 1998d. "Institutional Capacity Is More Important than the Speed of Reforms." *Voprosy Ekonomiky* 13. In Russian.

———. 1998e. "Will Russia Achieve Fast Economic Growth?" *Communist Economies and Economic Transformation* 4.

———. 1999. "The Financial System in Russia as Compared to Other Transition Economies: The Anglo-American versus the German-Japanese Model." *Comparative Economic Studies* 41 (1).

———. 2000. "Shock Therapy versus Gradualism: The End of the Debate (Explaining the Magnitude of the Transformational Recession)." *Comparative Economic Studies* (forthcoming, spring).

Russia. Goskomstat. *Rossiysky Statistichesky Yezhegodnik* [Russian Statistical Yearbook] and monthly publications. Moscow. Various issues.

Russian Economic Trends. Available at Internet webwebsite: http://www.hhs.se/site/ret/update.

"Russian Economy in 1998." 1999. *Trends and Prospects: Institute of Economics of Transition* 20 (March). In Russian.

Sachs, J. 1994. "Russia's Struggle with Stabilization: Conceptual Issues and Evidence." Paper prepared for the World Bank Annual Conference on Development Economics, Washington, DC, April 28–30.

———. 1995. "Why Russia Has Failed to Stabilize." Working Paper 103. Stockholm: Stockholm Institute of East European Economics.

———, A. Tornell, and A. Velasco. 1996. "Financial Crises in Emerging Markets: The Lessons from 1995." *Brookings Papers on Economic Activity* 1: 147–198.

Santiprabhob, V. 1997. "Bank Soundness and Currency Board Arrangements: Issues and Experience." IMF Paper on Policy Analysis and Assessment. Washington, DC: International Monetary Fund.

Stiglitz, Joseph. 1998. "More Instruments and Broader Goals: Moving toward the Post-Washington Consensus." World Institute for Development Economics Research Annual Lecture, Helsinki.

———. 1999. "Whither Reform? Ten Years of Transition." Paper prepared for the World Bank Annual Conference on Development Economics, Washington, DC, April 28–30.

Shmelev, N. 1998. "The Crisis Inside the Crisis." *Voprosy Ekonomiky* 10. In Russian.

———, and V. Popov. 1989. *The Turning Point: Revitalizing the Soviet Economy*. New York: Doubleday.

Smorodinskaya, N. 1998. "Capital Flight in Theory and in Practice: Analysis of the Russian Situation." *Banking Services* 9. In Russian.

Union of Soviet Socialist Republics. Goskomstat. *Narodnoye Khozyaistvo SSSR* [National Economy of the USSR]. Moscow. Various issues.

United Nations Conference on Trade and Development (UNCTAD). 1999. *World Economic Situation and Prospects for 1999*. New York and Geneva.

World Bank. 1996a. *From Plan to Market: World Development Report*. New York: Oxford University Press.

———. 1996b. *The Chinese Economy: Fighting Inflation, Deepening Reforms*. World Bank Country Study. Washington, DC: World Bank.

———. 1997a. *The State in a Changing World: World Development Report*. New York: Oxford University Press.

———. 1997b. *World Development Indicators 1997*. Washington, DC: World Bank.

———. 1998. *World Development Indicators 1998*. Washington, DC: World Bank.

Yang, H., and Y. Chen. 2000. "Capital Flight from China: Estimates and International Comparison." *World Economy* 1. In Chinese.

Yasin, E. 1999. "Defeat or Retreat? Russian Reforms and Financial Crisis." Report to the Economic Club, Moscow. January. In Russian.

Zettermeyer, J., and D. Citrin. 1995. "Stabilization: Fixed Versus Flexible Exchange Rates." In *Policy Experiences and Issues in the Baltics, Russian and Other Countries of the Former Soviet Union*. Washington, DC: International Monetary Fund.

C.D. Howe Institute Publications of Related Interest

Vladimir Popov has written three other C.D. Howe Institute publications on Soviet and post-communist economic problems:

May 1993 "The Russian Economy in 1993: The Failure of Shock Therapy and the Threat of Hyperinflation," *C.D. Howe Institute Commentary* 45. 28 pp.; $6.00; ISBN 0-88806-322-9.

May 1991 "Soviet Economic Reforms: Lost Opportunities and Remaining Hopes," *C.D. Howe Institute Commentary* 30 24 pp.; $6.00; ISBN 0-88806-279-6.

July 1989 "Perestroika: An Insider's View," *Trade Monitor* 10. 12 pp.; $5.00; ISBN 0-88806-249-4.

Recent Issues of *C.D. Howe Institute Commentary*

No. 137, February 2000 Mintz, Jack M., and Thomas A. Wilson. "Capitalizing on Cuts to Capital Gains Taxes." 27 pp.; $10.00; ISBN 0-88806-470-5.

No. 136, February 2000 Poschmann, Finn, and John Richards. "How to Lower Taxes and Improve Social Policy: A Case of Having Your Cake and Eating It Too." 18 pp.; $10.00; ISBN 0-88806-468-3.

No. 135, February 2000 Monahan, Patrick. "Doing the Rules: An Assessment of the Federal *Clarity Act* in Light of the *Quebec Secession Reference*." 39 pp.; $10.00; ISBN 0-88806-467-5.

No. 134, February 2000 Robson, William B.P., Jack M. Mintz, and Finn Poschmann. "Budgeting for Growth: Promoting Prosperity with Smart Fiscal Policy." 35 pp.; $10.00; ISBN 0-88806-469-1.

No. 133, December 1999 Fried, Joel, and Ron Wirick. "Assessing the Foreign Property Rule: Regulation without Reason." 31 pp. ; $9.00; ISBN 0-88806-464-0.

No. 132, December 1999 Dobson, Wendy. "Prisoners of the Past in a Fast-Forward World: Canada's Policy Framework for the Financial Services Sector." 35 pp.; $9.00; ISBN 0-88806-463-2.

No. 131, December 1999 Laidler, David. "What Do the Fixers Want to Fix? The Debate about Canada's Exchange Rate Regime." 17 pp.; $9.00; ISBN 0-88806-461-6.

No. 130, September 1999 Shillington, David. "The Dark Side of Targeting: Retirement Saving for Low-Income Canadians." 14 pp.; $9.00; ISBN 0-88806-460-8.

The C.D. Howe Institute

The C.D. Howe Institute is an independent, nonprofit, research and educational institution. Its goals are to identify current and emerging economic and social policy issues facing Canadians; to analyze options for public and private sector responses; to recommend, where appropriate, particular policy options that, in the Institute's view, best serve the national interest; and to communicate the conclusions of its research to a domestic and international audience in a clear, nonpartisan way. While its focus is national and international, the Institute recognizes that each of Canada's regions may have a particular perspective on policy issues and different concepts of what should be national priorities.

The Institute was created in 1973 by a merger of the Private Planning Association of Canada (PPAC) and the C.D. Howe Memorial Foundation. The PPAC, formed in 1958 by business and labor leaders, undertook research and educational activities on economic policy issues. The Foundation was created in 1961 to memorialize the late Rt. Hon. Clarence Decatur Howe, who served Canada as Minister of Trade and Commerce, among other elected capacities, between 1935 and 1957. The Foundation became a separate entity in 1981.

The Institute encourages participation in and support of its activities from business, organized labor, associations, the professions, and interested individuals. For further information, please contact the Institute's Membership Coordinator.

The Chairman of the Institute is Kent Jespersen; Jack M. Mintz is President and Chief Executive Officer.